North Dakota State Investment Board

September 2001

ABSOLUTELY RELATIVE

"Make the best of a bad situation!" How many times have we heard that one? Plenty! And that's what we try to do, in our everyday lives, and in the management of the investments overseen by the State Investment Board (SIB). And as for "bad situations," you can justifiably attach that label to the investment markets of fiscal year 2001.

The SIB oversees the management of 19 funds. These include the Public Employees Retirement System (PERS), the Teachers' Fund for Retirement, the Workers Compensation Fund, several Insurance Department funds and a number of other statutory and contractual relationships. Most of the money entrusted to the SIB is pooled into one of two funds: the Pension Trust or the Insurance Trust. Each individual fund sets its own asset allocation, defining exactly what percentage of investments are to be placed in each asset class such as Large Cap Domestic Equity (stocks of big U.S. companies) and Domestic Fixed Income (U.S. government and highgrade corporate bonds).

Given a specific asset allocation, it is the job of the SIB to invest the monies and maintain the allocation in each asset class. It is important to note that each of the 19 funds participating in the SIB investment program independently sets their own asset allocation, most often with the advice of an investment consultant of their choosing. The SIB does not have the authority to set asset allocation, but simply to implement it.

Asset allocation is an important determinant of investment return. As a simplified example, imagine if a fund had an asset allocation of 100% stocks. We would expect that fund to have very different returns than a fund with a 100% allocation to bonds. Right? Right! The importance of asset allocation is so great that many academicians believe that it explains 90% or more of the actual performance of a fund.

So what is the SIB's mission? The SIB seeks to make the most of a given asset allocation. This brings us back around to our opening statement, "Make the best of a bad situation!"

The vast majority of our readers are PERS or TFFR plan participants, so we will focus on the Pension Trust, a \$2.6 billion pooled fund that includes the \$1.2 billion PERS plan and the \$1.3 billion TFFR plan. These plans both use ten distinct asset classes to achieve their long term objectives. Because these plans have different actuarial circumstances upon which the asset allocation is set, the allocations differ. (See asset allocation inside.)

Okay, let's talk "bad situations." How about the Large Cap Domestic Equity sector? This represents 30% of both the PERS fund and the TFFR fund. We measure how this market performed by using an index. We are all familiar with the Dow Jones Industrial Average which measures a



NORTH DAKOTA
RETIREMENT AND
INVESTMENT OFFICE

Teachers' Fund for Retirement State Investment Board

State Investment Board

Lt. Governor Jack Dalrymple, *Chair*Weldee Baetsch, Brent Edison,
Kathi Gilmore, David Gunkel, Paul Lofthus,
Jim Poolman, Gary Preszler, Howard Sage,
Mark Sanford, Norman Stuhlmiller.

RIO Administrative Office

Steve Cochrane, Executive Director/CIO Fay Kopp, Deputy Director/Retirement Officer Shelly Schumacher, Editor

ND Retirement and Investment Office

1930 Burnt Boat Drive, P.O. Box 7100 Bismarck, ND 58507-7100 701-328-9885, Toll free: 1-800-952-2970 www.discovernd.com/rio

Articles are for general information only and are not intended to provide specific advice or recommendation. Other forms of this newsletter are available on request.





Steve Cochrane, CFA Executive Director/CIO

continued from cover...

ABSOLUTELY RELATIVE

composite of only 30 stocks. To get a better feel for how the broad large cap (short for capitalization) stock market did over any particular time period, we look at the Standard & Poor's 500 Composite Stock Price Index (S&P 500, for short), an index of 500 companies' stock prices. And for the fiscal year 2001, the S&P 500 lost 14.83%. That's "bad." Well, maybe if things are a bit crazy at home, perhaps some relief from foreign investments in stocks is in order? After all, PERS has 8% of its investments in this area, and TFFR has 20%. We measure the International Equity (big foreign company stocks) with an index known as EAFE. Well, for the fiscal year, EAFE was down 17.95%. EAFE is not how we spell "relief"! Emerging Market stocks fared even worse, off 25.93% for the period as measured by the MSCI Emerging Markets Free Index. In all, six out of ten asset classes turned in

FROM THE DIRECTOR'S CHAIR

If you just read the lead article in this newsletter, you are aware that the SIB did a good job minimizing the damage the markets were more than willing to dish out this past fiscal year. But even after turning in a nice relative performance, the net result is still a loss in value in the Pension Trust and its participating funds including PERS and TFFR. We all keep an eye on investments because we know that investment return is the fuel that provides purchasing power for future benefit increases. And that's why we happily show up at work each day. We all look forward to a well-funded retirement!

Everybody knows that investment markets go up and down. Over the long run, it is expected that the trend will be up because worldwide capital and wealth grow. In order to participate in economic expansion, one must invest as an equity owner, a lender, or both. Your pension portfolios contain many types of equity and lending vehicles. But everybody also knows that some years come around as payback for the good ones, and here we are. FY 2001 was definitely payback and the markets as of this writing remain weak.

In previous issues of this newsletter, we discussed investment accounting issues such as the concept of "smoothing." We will revisit that one as it is very pertinent to the accounting for a year such as FY 2001. Here's how it works:

Each year, a pension fund experiences an investment return. Let's use the PERS fund to illustrate this.

Table 1 PERS – Fiscal Year Investment Performance History (%)

FY97 FY98 FY99 FY00 FY01 19.71 16.08 10.63 9.34 -4.12

Investment returns from year to year can be quite volatile (Table 1). If the actuary were to use only the past year's performance in the annual review, the fortunes of the fund would ebb and flow quite dramatically. Because of the long-term nature of the investment trust, the actuary is free to use a methodology called "smoothing." Instead of using oneyear performance, the actuary will use the performance of the most recent "rolling 5-year period." In essence, the actuary will use 20% of each of the last five years' investment returns to sum up the investment performance to be plugged in to the actuarial evaluation.

In our PERS example, rather than FY01 going in the books as -4.12, it is

sub-zero performances for the one-year period. In the four positive returners, the highest return was Domestic Fixed Income, as measured by the Lehman Aggregate Index, with a return of 11.22%. That helps, but U.S. high-grade bonds account for only 28% of the PERS fund and 7% of the TFFR fund. So what we have had is a lousy market within which to invest, or in other words, "a bad situation."

Just for illustrative purposes, let's say we had a fund that was invested 50% in Large Cap Domestic Equity and 50% in Domestic Fixed Income. If we

multiply 50% times the return on the S&P 500 for fiscal year 2001, we get the following: $50\% \times -14.83\% = -7.42\%$. Multiplying the return in the Domestic Fixed Income market, we find that 50% of 11.22% is 5.61%. By adding -7.42% and 5.61%, we find that a 50-50 portfolio invested in the stock and bond market would have returned -1.81%, as measured by the relevant indices. This is a weighted average return. If an investor in such a portfolio were able to beat the market by outperforming the indices, then the return could have been higher than -1.81%.

Table 2 Smoothing 1997-2001				
FY	Return	x20%		
1997	19.71	3.94		
1998	16.08	3.22		
1999	10.63	2.13		
2000	9.34	1.87		
2001	-4.12	<u>-0.82</u>		
		=10.34		

presumed to have a return of 10.34%, as shown in Table 2.

Smoothing recognizes the long-term nature of investments. Measuring investment returns over arbitrary periods such as one month or one quarter can significantly distort the true underlying secular trend in valuations. Even one-year periods are too short to capture the mega-trends. Smoothing acknowledges that the highs are too high and the lows are too low and the long-term "truth" lies

somewhere in between. By eliminating the short-term bias towards irrational valuation, smoothing adds consistency and a dramatic reduction in volatility of returns.

Changing direction a bit: Can you recall your "investment mood" in late 1999? Possibly you were feeling rather giddy –

rather giddy –
returns had been unbelievably great.
There may have even been a sense
that we had gotten ahead of ourselves
in valuations and sooner or later, we
would have to give a little back as
returns tend to regress towards their

The accompanying chart tracks the modern history of the TFFR fund, reflecting its healthy long term

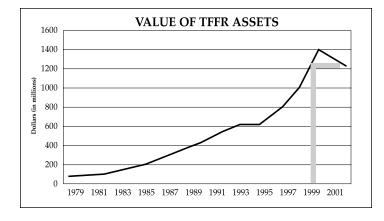
long-term averages. Am I close?

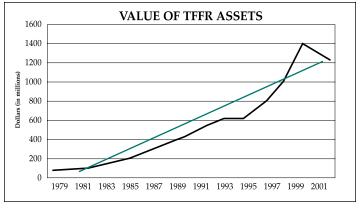
growth. But notice the recent setback. Where does that leave us? If you plot a line, it will indicate that we have essentially given back some of the frothy return and are now living in a late 1999 world of absolute values.

What is a "rolling 5-year period?"
For periods ended in 2001, we look at 1997-2001.
Next year, we drop the first year and add the new one.
For periods ended in 2002, we will look at 1998-2002,
and so on...

Ok, maybe not as fun as going back to "Happy Days," but it helps me feel at least a little better!

Another way to look at it is to lay a linear regression line as shown in green to illustrate how we are just experiencing normal fluctuation about the mean.





Now let's expand this example to the real world of the Pension Trust. In our example, we had two asset classes; the Pension Trust has ten. Each asset class has an index that reflects how well it performed for the year. By taking the weighted average of the index returns in each asset class,

Fund Pension Trust PERS TFFR	Policy Benchmark Return -8.29% -6.47% -10.37%	Actual Fund Return -5.93% -4.12% -7.31%	Excess Return +2.36% +2.35% +3.06%

we can calculate the policy benchmark return for the entire Trust. By the same methodology, we can find the policy benchmark returns for the PERS and TFFR funds. By comparing policy benchmark returns with actual returns, we observe whether any value has been added through the management of the asset classes. And

this is how we seek to "make the best of a bad situation."

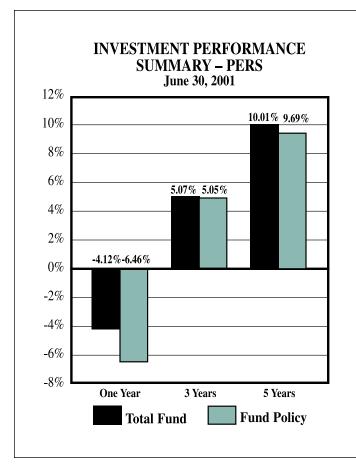
The accompanying table summarizes the investment results for the 2001 fiscal year.

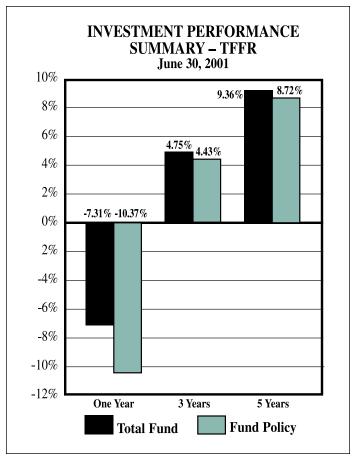
As the table indicates, the policy benchmark returns were rather dismal; a very tough environment for investments. The actual returns show that value was added above what the markets made available. In fact, because the Pension Trust outperformed its policy benchmark by 2.36%, in excess of \$60 million was added to the Fund's return.

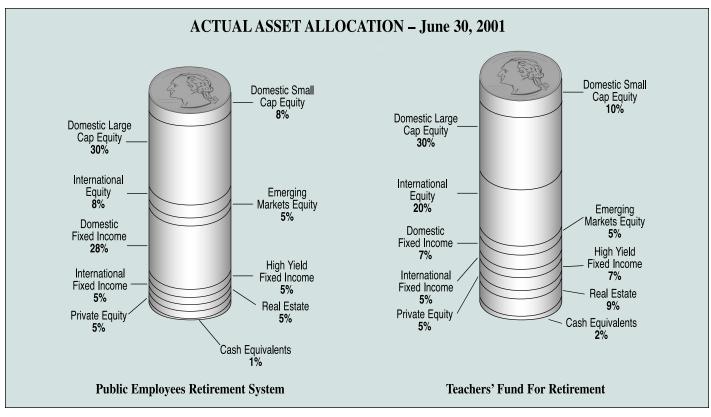
While absolute returns were negative, relative returns were very good. And in times like these, that's "making the best of a bad situation."

INVESTMENT PERFORMANCE

PERIODS ENDED JUNE 30, 2001







WELCOME NEW SIB MEMBERS



Gary Preszler

Brent Edison

Gary Preszler, Commissioner of University and School Lands, and Brent Edison, Executive Director of the Workers Compensation Bureau, serve as ex officio members of the State Investment Board.

SIB ELECTS NEW OFFICERS

The State Investment Board (SIB) recently held its annual election of officers. The Board chose the following members to hold leadership positions for 2001-2002:

Chairman: Lieutenant Governor Jack Dalrymple

Vice-Chair: Mr. Howard Sage

Mr. Norm Stuhlmiller was re-appointed to serve as Parliamentarian.

INVESTMENT MANAGERS INTACT



As we sort out the aftermath of the recent attacks on the United States, we must recognize that many investment firms were negatively impacted. Losses of personnel, facilities and systems were incurred. This aspect of the tragedy is of particular interest to participants in the investment markets.

In the time since the September 11th assault on our nation, the Retirement and Investment Office (RIO), on behalf of the State Investment Board (SIB) and its participating funds, has maintained continuous communications with its many independent external investment managers. The twenty managers employed by the SIB are geographically distributed throughout the United States. Two of the managers are located in New York City, none are in Washington D.C. Without exception, all firms have reported no loss of life and no operational impairment. In addition, while the SIB has approximately \$210 million in real estate holdings, none of the investment properties are located in lower Manhattan. We are fortunate, for many have not been so lucky.

SIB AUDIT COMMITTEE REAPPOINTED



Pictured, left to right, back row: Daryl Splichal, Norm Stuhlmiller, David Gunkel. Front row: Kathi Gilmore, Korrine Lang

The SIB is pleased to report that the members of the Audit Committee have agreed to serve again and were reappointed in July.

The Audit Committee consists of five members – three from the SIB and two independent participants. Current members include Norm Stuhlmiller, representing the Teachers' Fund for Retirement, David Gunkel of the Public Employees Retirement System, and State Treasurer Kathi Gilmore representing elected and appointed officials. Korrine Lang of Job Service North Dakota and Daryl Splichal, a Certified Internal Auditor with MDU Resources Group, Inc., serve as the independent participants on the Committee.

Thank you for your service to the State Investment Board!

Certificate of Achievement for Excellence in Financial Reporting

Presented to

North Dakota Retirement and Investment Office

For its Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2000

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



ACHIEVEMENT AWARD RECEIVED

The ND Retirement and Investment Office's Comprehensive Annual Financial Report (CAFR) for June 30, 2000 has qualified for a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA).

The Certificate of Achievement is the highest form of recognition in public employee retirement system accounting and financial reporting, and its attainment represents a significant accomplishment. In order to be awarded a Certificate of Achievement, a government entity must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

Visit our website for information from the North Dakota Retirement and Investment Office...

www.discovernd.com/rio

BISMARCK, ND 58507-7100 PO. BOX 7100 1930 BURNT BOAT DRIVE State Fund for Retirement Feachers Fund for Retirement

INVESTMENT OFFICE
RETTREMENT AND
NORTH DAKOTA



28201
BISWPKCK, ND
PRIMIT NO. 325
PERMIT NO. 325
PERMIT NO. 325
PERMIT NO. 325